Information Meeting on the

Carbon Offsetting and Reduction Scheme for International Aviation CORSIA

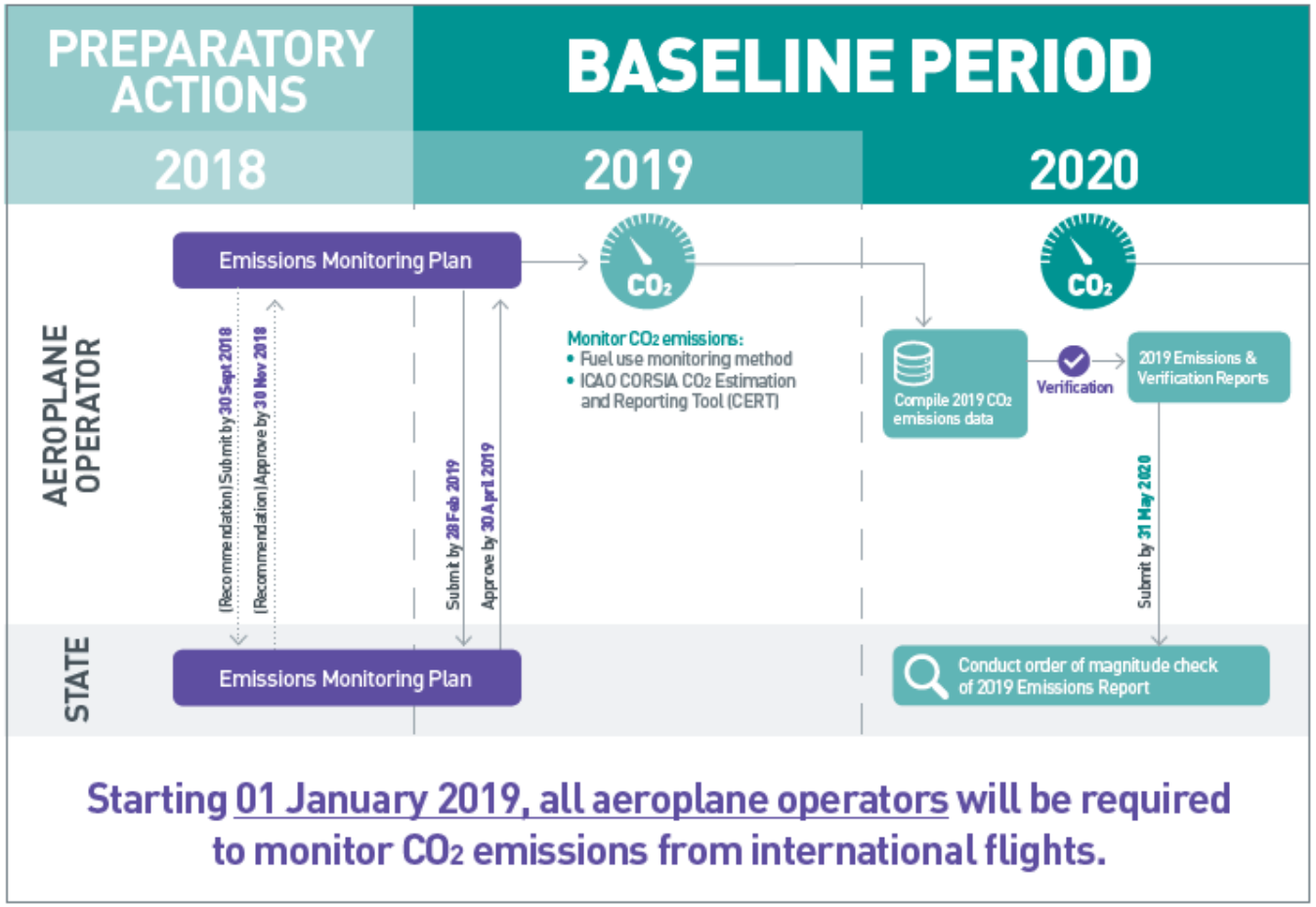
Implementation: Next steps

Alice Suri,
Bern, May 15th 2018

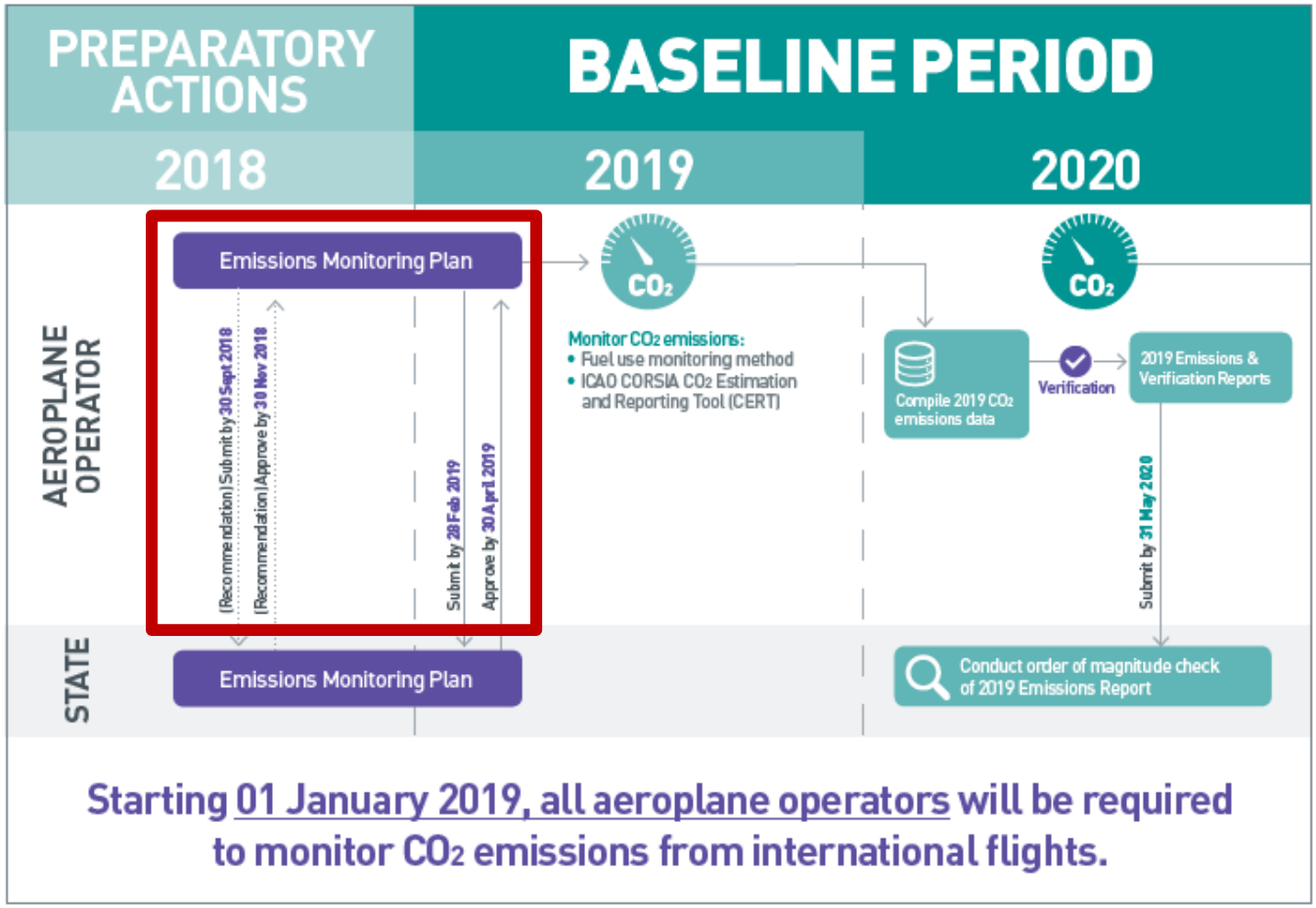
Content

1. Preparatory Actions 2018: Emissions Monitoring Plan (EMP)
2. Baseline Period 2019/2020: Monitoring
3. Baseline Period 2019/2020: Reporting/Verification
4. Next Steps

Preparatory Actions and Baseline Period 2018-2020



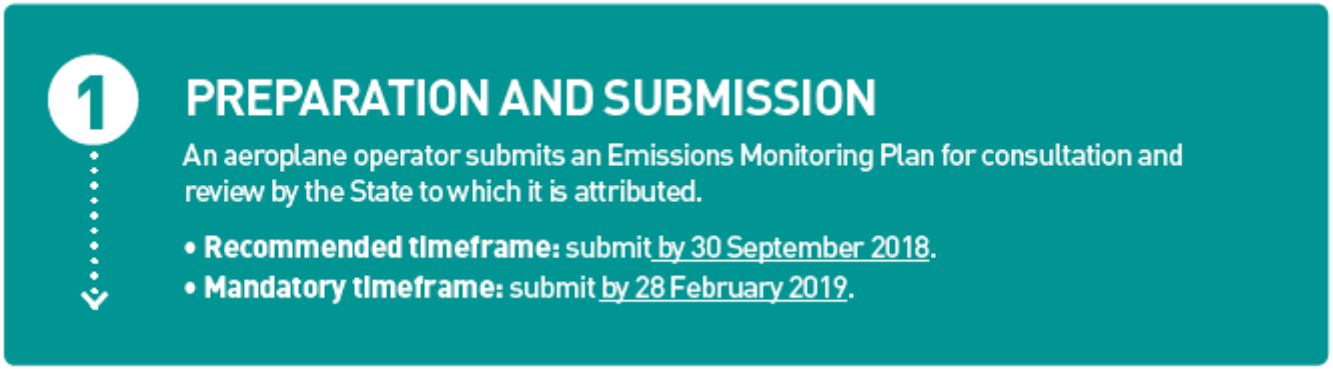
Preparatory Actions: Emissions Monitoring Plan



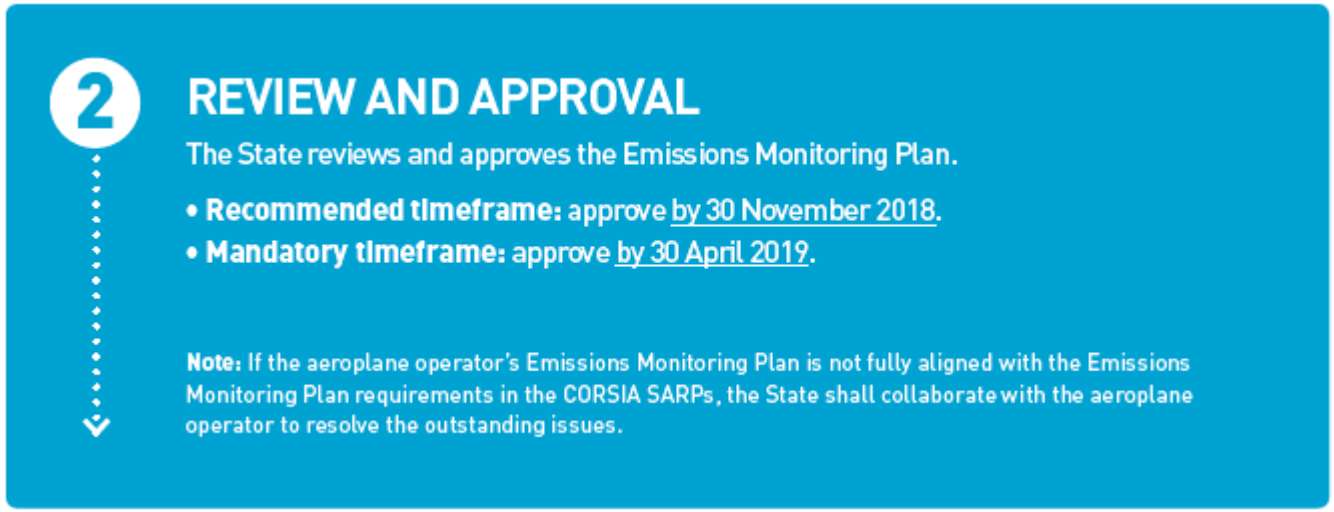
Emissions Monitoring Plan

- An Emissions Monitoring Plan (EMP) is a collaborative tool between the State and the aeroplane operator. The EMP:
  - Identifies the most appropriate means and methods for CO_2 emissions monitoring on an operator-specific basis; and
  - Facilitates the reporting of required information to the State.
- An aeroplane operator shall submit an EMP to the State to which it is attributed for approval.
- The State and aeroplane operator should maintain clear and open communication during the development and review of an EMP.

Developing an Emissions Monitoring Plan



Developing an Emissions Monitoring Plan



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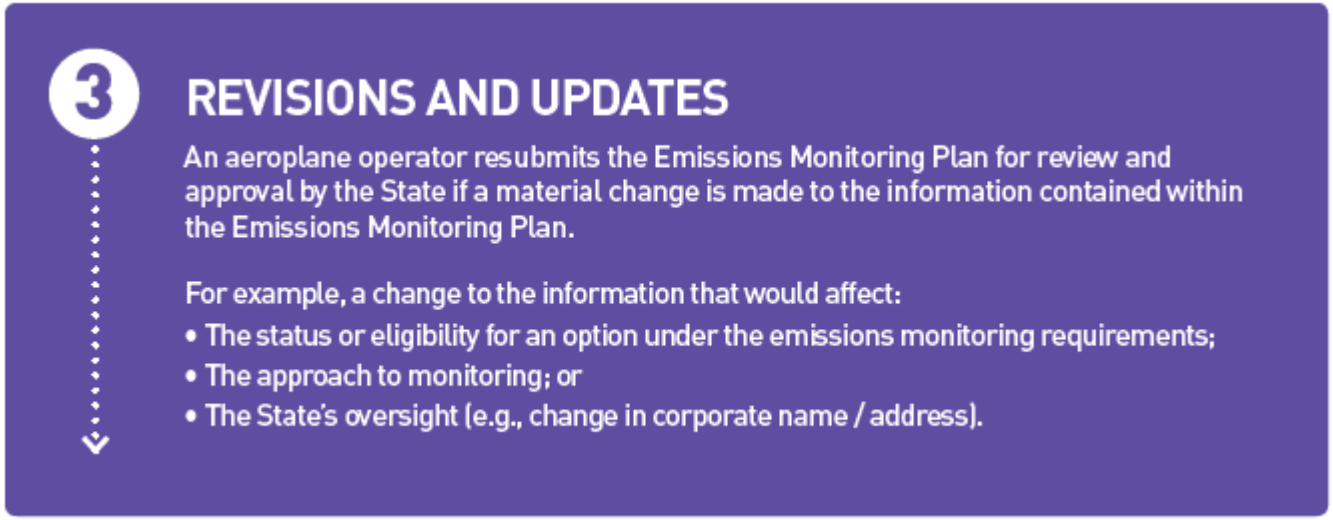

Contents of an Emissions Monitoring Plan*

1. Aeroplane operator identification
2. Fleet and operations data
3. Methods and means of calculating emissions from international flights
4. Data management, data flow and control

***According to the draft CORSIA SARPs**

Aeroplane operator identification

EMP Contents
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Aeroplane operator identification

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AIR OPERATOR CERTIFICATE

[1]	STATE OF THE OPERATOR[2]	[1]
	ISSUING AUTHORITY[3]	
ACC #[4]: Expiry date[5]:	OPERATOR NAME[6] Dba trading name[7]: Operator address[8]: Telephone[9]: Fax: Email:	OPERATIONAL POINTS OF CONTACT[10] Contact details, at which operational management can be contacted without undue delay, are listed in _____[11].
This certificate certifies that _____[12] is authorized to perform commercial air operations, as defined in the attached operations specifications, in accordance with the operations manual and the _____[13].		
Date of issue[14]:	Name and signature[15]: Title:	

Notes:—
1. For use of the State of the Operator.
2. Replace by the name of the State of the Operator.
3. Replace by the identification of the issuing authority of the State of the Operator.
4. Unique AOC number, as issued by the State of the Operator.
5. Date after which the AOC ceases to be valid (dd-mm-yyyy).
6. Replace by the operator's registered name.
7. Operator's trading name, if different. Insert "dba" before the trading name (for "doing business as").

ANNEX 6 — PART I APP 6-1 10/11/16

- Name of the operator
- Information for attributing the operator to a State:
  - ICAO Designator;
  - Air operator certificate; or
  - Place of juridical registration
- Operator's ownership structure, including parent-subsidiary relationships
- Contact information, including operator's CORSIA Focal Point
- Description of the operator's activities

Fleet and operations data

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Fleet and operations data

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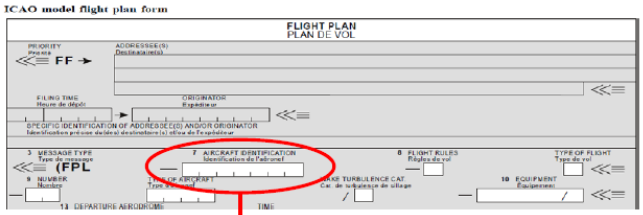
Fleet declaration			
No	ICAO type designator	Fuel type	Number of aeroplanes
1	A320	Jet-A	10
2	B737	Jet-A	10
3	E190	Jet-A	15
4	BCS3	Jet-A	15
5	…	…	…
6	…	…	…

- Information on the operator's aeroplane types and types of fuel
- Flight attribution to the operator
- Procedures to track changes in the fleet
- List of State pairs operated at the time of the EMP submission
- Procedures to identify international flights and exempted flights



- ICAO Designator
- Registration mark
- Emissions monitoring plan code
- Aircraft owner

Methods and means of calculating emissions from international flights

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Methods and means of calculating emissions from international flights

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*CO_2 Emissions = Mass of fuel * Fuel Conversion Factor of given fuel type*

- An aeroplane operator shall monitor and record its fuel use from international flights in accordance with an eligible monitoring method
- Monitoring method shall be approved by the State as a part of aeroplane operator's Emissions Monitoring Plan
- The aeroplane operator shall use the same eligible monitoring method for the entire compliance period

Methods and means of calculating emissions from international flights

For the 2019-2020 period there are two possibilities to calculate emissions:

A) Fuel use monitoring methods
(for operators ≥ 500 000 tCO_2)

B) CO_2 Estimation and Reporting Tool CERT
(for operators ≤ 50 000 tCO_2 but > 10 000 tCO_2)

Data management, data flow and control

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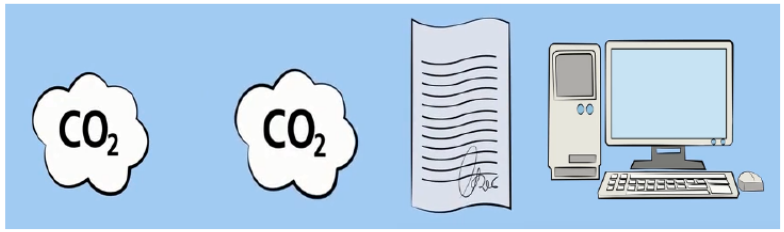


- Aeroplane operator's internal roles, responsibilities and procedures on data management, and related risks
- Procedures to handle possible data gaps and errors
- Documentation and record keeping plan
- Procedures for communicating the changes in the EMP to the State

Emissions Monitoring Plan Template

CORSIA

EMISSIONS MONITORING PLAN (EMP)

CONTENTS

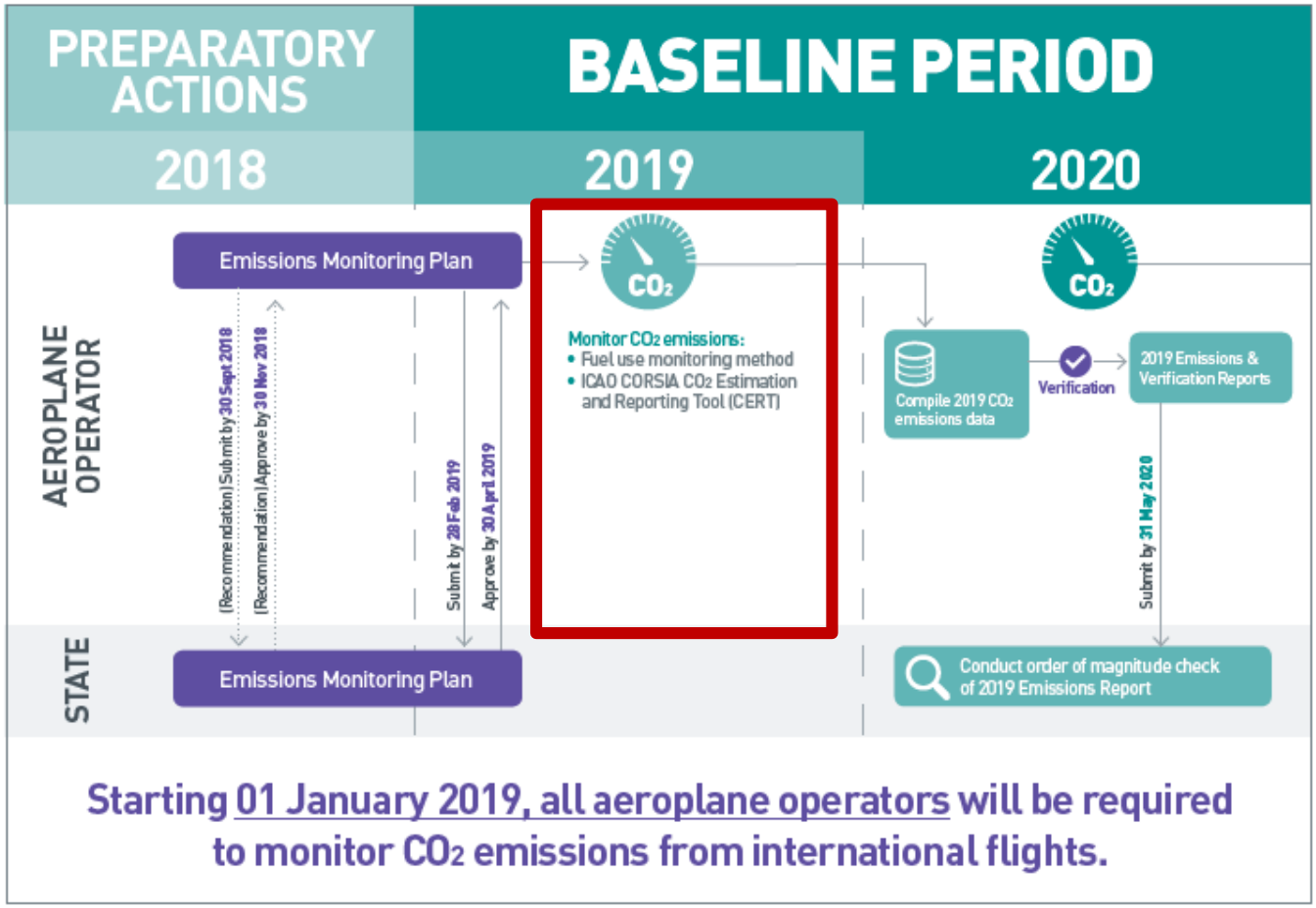
Template Information

Template provided by:	
Version (publication date):	

Approval of an Emissions Monitoring Plan

- EMP shall be approved by the State (FOCA)
- If the aeroplane operator's EMP is determined to be incomplete and/or inconsistent the State shall engage with the aeroplane operator to resolve outstanding issues. This may involve returning the EMP to the aeroplane operator along with an explanation as to why the plan was found deficient, or a request for further information.

Baseline Period: Monitoring



CO_2 Estimation and Reporting Tool (CERT)

To simplify the estimation and reporting of CO_2 emissions from international flights for operators with low level of activity in fulfilling their monitoring and reporting requirements, ICAO has developed the CORSIA **CO_2 Estimation and Reporting Tool (CERT)**.

CERT	Aeroplane Operators International CO_2 Emissions (tonnes) 2019 – 2020*		
Function / Use	⩽ 10K CO_2	< 500K CO_2	⩾ 500K CO_2
Preliminary CO_2 Assessment	✓	✓	✓
CO_2 Estimation & Reporting	No CORSIA requirement	✓	Not Eligible to use **CERT** **
Filling Data Gaps	No CORSIA requirement	✓	✓

*Note: from 2021-2035 operators can use CERT to estimate and report emissions if their annual emissions from international flights subject to offsetting requirements are < 50 000 tonnes of CO_2 annually.

**Note: If an aeroplane operator uses CERT for 2019 CO_2 estimation and reporting (based on their preliminary CO_2 assessment) but exceeds the threshold of 500 000 tonnes in 2019, the State could permit the operator to continue to use CERT during 2020.

CO_2 Estimation and Reporting Tool (CERT)

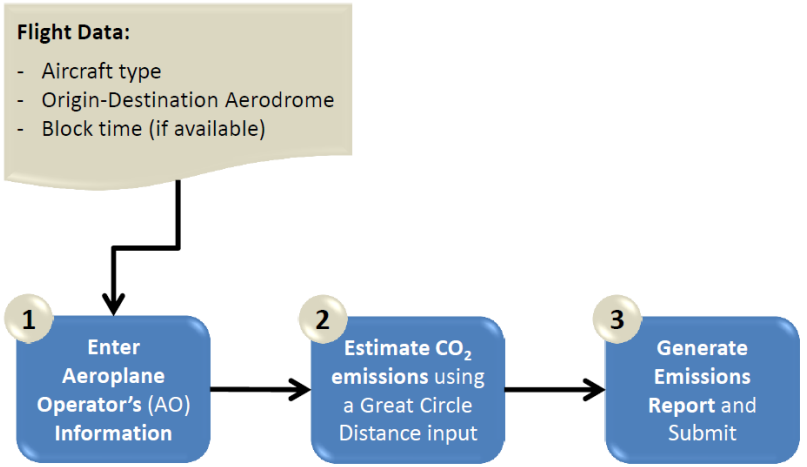
The CERT comprises a three-step process

(1) Entering Aeroplane Operator's Basic Information

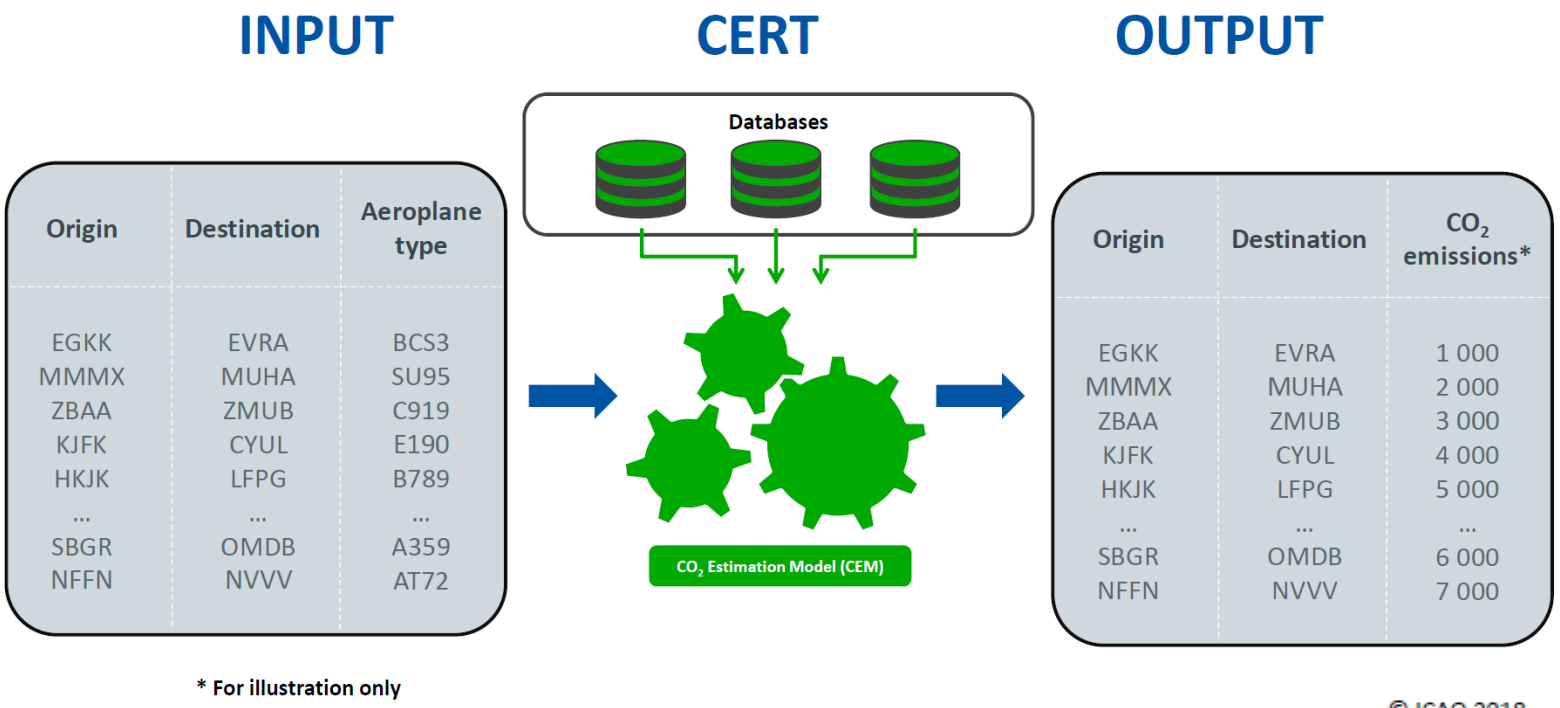
(2) Entering Flight Data to estimate CO_2 Emissions by entering:

a) Aeroplane Type by ICAO Type Designator
b) Origin-Destination Aerodrome
c) Number of flights (if batches of flights are entered)

(3) Generating the Summary Assessment report in support for EMP submission



CO_2 Estimation and Reporting Tool (CERT)



* For illustration only

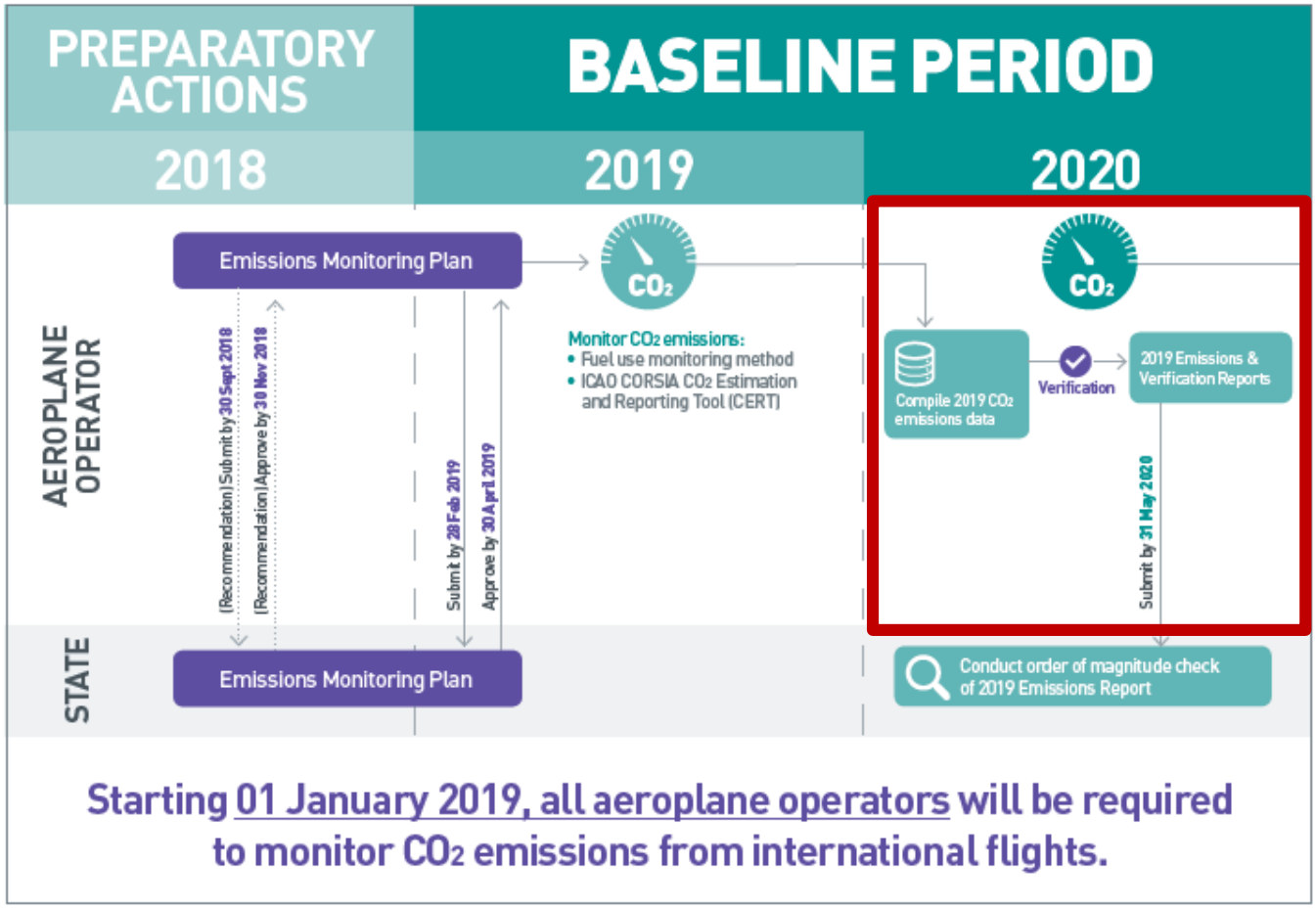
CO_2 Estimation and Reporting Tool (CERT)

The CERT will have up to 4 functionalities:

	CERT CO_2 Estimation & Reporting Tool		
Year of Validity	**2018** (Version 2018)	**2019-2020** (Version 2019-2020)	**2021-2035** (Version 2021-2035)
Estimation of CO_2 for Determination of Simplified Compliance Procedures Eligibility	Yes	Yes	Yes
Report Generation Functionality	Partial*	Yes	Yes
Monitoring (Estimating CO_2)	No	Yes	Yes
List of States pairs subject to offsetting requirement	No	No	Yes

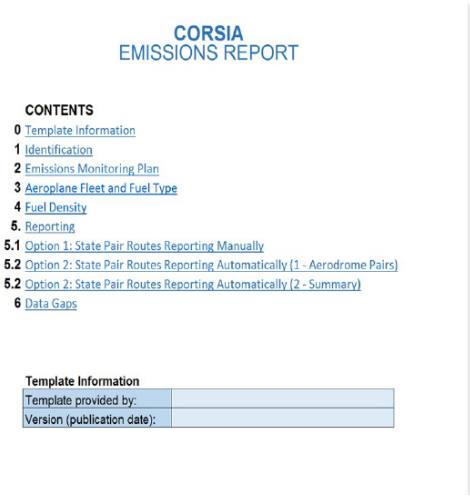
*** The 2018 Version of the CERT includes the functionality to generate a summary report of the assessment of the estimation of the Aeroplane Operators CO_2 emissions. The report can be used as supporting evidence to the operator's Emissions Monitoring Plan.**

Baseline Period: Reporting/Verification



Emissions Monitoring Report

- Standardized reporting templates will be made available to facilitate uniform reporting from aeroplane operators to States
  - Template of Emissions Report
  - Template of sustainable aviation fuels supplementary information to the Emissions Report

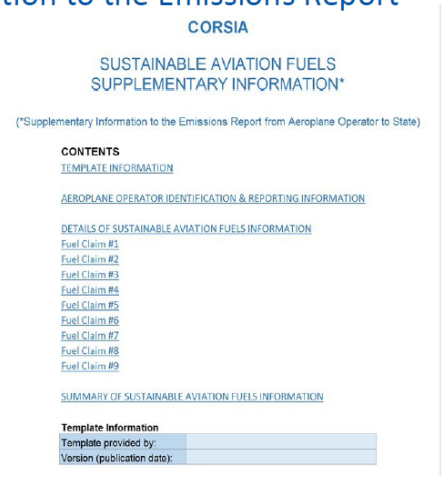


CORSIA
EMISSIONS REPORT

CONTENTS

Template Information

Template provided by:	
Version (publication date):	



CORSIA

SUSTAINABLE AVIATION FUELS
SUPPLEMENTARY INFORMATION*

(*Supplementary Information to the Emissions Report from Aeroplane Operator to State)

CONTENTS

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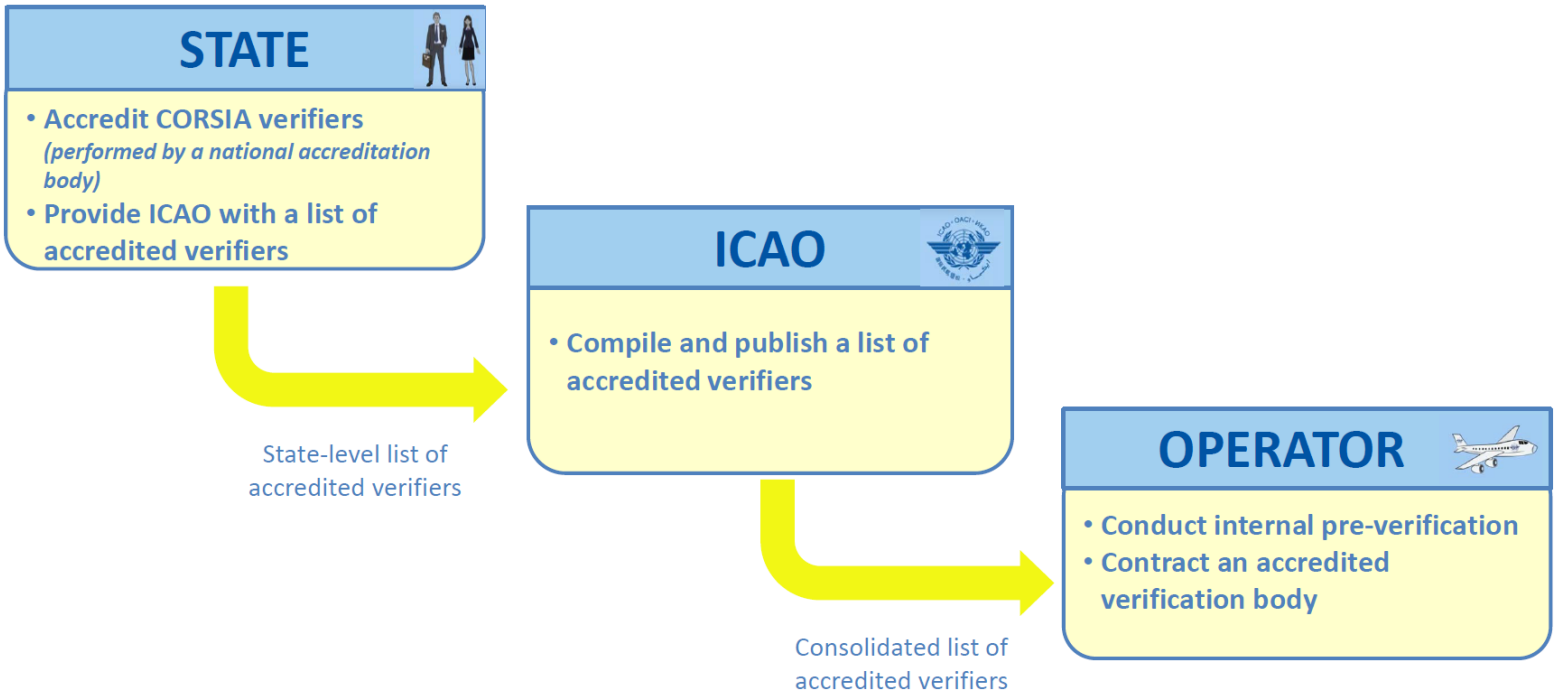
Verification of an Emissions Monitoring Report



Next steps

- EMP template for Swiss aeroplane operators and the tool CERT will be available via the FOCA website as soon as the SARP's package is publicly available (expected in **July 2018**)
- Submission of an EMP by **30 September 2018** to FOCA as a signed hardcopy to BAZL, LEUW, 3003 Bern and by email to corsia@bazl.admin.ch
- Approval of the EMP by **30 November 2018** by FOCA
- Monitor 2019 CO_2 emissions from international flights from **1 January to 31 December 2019**
- Compile 2019 CO_2 emissions data and submit the verified Emissions monitoring report until **31 May 2020**

Questions?